

IGBT WITH CHANNEL RESISTORS

ABSTRACT

An IGBT has striped cell with source stripes 2a, 2b continuous or segmented
5 along the length of the base stripe 3. The opposite stripes are periodically connected
together by the N⁺ contact regions 20 to provide channel resistance along the width of
the source stripes 2a, 2b. For continuous stripes the resistance between two sequential
contact areas 20a, 20b is greatest in the middle and current concentrates near the
source contact regions 20. The wider the spacing between the contacts 20, the larger
10 the resistive drop to the midpoint between two N⁺ contacts 20.

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